

(19) United States

(12) Patent Application Publication (10) Pub. No.: US 2007/0081907 A1 Ben-Yosef et al.

(43) Pub. Date: Apr. 12, 2007

(54) DIAPHRAGM PUMP

(75) Inventors: Aryth Ben-Yosef, Mevasseret Zion (IL); Ephraim Carlobach, Ra'anana

Correspondence Address: DARBY & DARBY P.C. P. O. BOX 5257 NEW YORK, NY 10150-5257 (US)

(73) Assignce: Orldion Medical 1987 LTD, Jerusalem (IL)

10/566,641 (21) Appl No:

Jul./18,\2004 (22) PCT Filed:

(86) PCT No.: PCT/IL04/00693

§ 371(c)(1),

(2), (4) Date: Dec. 4, 2006

Foreign Application Priority Data (30)

157160 Jul 29, 2003 (II.)

Publication Classification

(51)Int. Cl.

F04B 17/00

(2006 01)

U.S. Cl. 417/413.1; 92/98 R

ABSTRACT (57)

A diaphragm pump and a method for aligning thereof, the pump including an electric motor, a motor shaft, driven by the electric motor for rotation about an electric motor shaft axis, an eccentric drive, driven by the electric motor, via the motor shaft, to provide reciprocal driving along a pump driving axis, the eccentric drive including an eccentric drive shaft rotating about an eccentric drive shaft axis, the eccentric drive shaft axis being coaxial with the electric motor shaft axis, a non-rigid coupling interconnecting the motor shaft and the eccentric drive shaft and a diaphragm pumping assembly having a fluid inlet and a fluid outlet communicating with a pumping chamber, the pumping chamber having a diaphragm arranged to be reciprocally driven about the pump driving axis

